

## Case 3047

***Holospira* Martens, 1860 (Molluca, Gastropoda): proposed designation of *Cylindrella goldfussi* Menke, 1847 as the type species**

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**Abstract.** The purpose of this application is the designation of *Cylindrella goldfussi* Menke, 1847 as the type species of the North American pulmonate genus *Holospira* Martens, 1860 (family UROCOPTIDAE). The holotype of the present type species, *C. pilocerei* Pfeiffer, 1841, no longer exists, and from its description that species could belong not only to *Holospira* (as at present used) but also to *Malinchea*, *Stalactella* or perhaps other genera. Stability of nomenclature in the subfamily HOLOSPIRINAE Pilsbry, 1946 would be maintained by the proposed type species designation.

**Keywords.** Nomenclature; taxonomy; Gastropoda; UROCOPTIDAE; HOLOSPIRINAE; *Holospira*; *Holospira goldfussi*.

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1. Albers (1850, p. 209) proposed the generic name *Acera* for five nominal species, including *Cylindrella pilocerei* Pfeiffer, 1841 (p. 47) and *C. goldfussi* Menke, 1847 (p. 2); no type species was designated.

2. Because *Acera* Albers is a junior homonym of *Acera* Cuvier, 1810 and a 'virtual homonym' of *Akera* Müller, 1776, the new replacement name *Holospira* was proposed by Martens (1860, p. 39). *Holospira* remains a potentially valid name because the suppression in Opinion 1079 (July 1977) of *Acera* Cuvier retained that name as available for purposes of homonymy, thus continuing to disqualify *Acera* Albers.

3. Martens (1860) designated *Cylindrella pilocerei* as the type species of *Holospira*, and retained in it some of the other species (including *C. goldfussi*) which Albers (1850) had placed in his genus *Acera*.

4. The name *Holospira* has remained in use, and it is the type genus of the subfamily HOLOSPIRINAE Pilsbry, 1946 of the family UROCOPTIDAE. At present (see e.g. Pilsbry, 1946, 1953) the subfamily contains 16 genus-group taxa and approximately 135 described species. Most species are confined to very small geographic ranges (less than a few sq. km.) because they are obligate inhabitants of limestone outcrops. Important diagnostic characters for genus, subgenus and species identifications include the number and configuration of lamellae that comprise the internal barrier within the last three whorls. Convergence in external shell characters is common in the subfamily; these characters have no relationship to the internal lamellar barrier, and seldom are they useful for generic diagnoses.

5. The internal barrier of *Cylindrella pilocerei*, the type species of *Holospira*, was never described. The external shell characters (as described by Pfeiffer (1841, p. 47) and illustrated by Philippi (1845, p. 183, pl. 1, fig. 7)) comply with any of three

genus-group taxa that occur in the general region of its type locality: *Holospira*, *Stalactella* Bartsch, 1906 and *Malinchea* Bartsch, 1945. The species may also belong to some other genus. *Holospira* (as currently understood) has four smooth internal lamellae, whereas *Malinchea* has three and *Stalactella* has only two, one of which is spinose. The holotype of *C. pilocerei* has not been located in the collections where it might be expected (the Berlin Museum, the Senckenberg Museum, or the Natural History Museum, London), and it was probably destroyed during World War II together with most of the Pfeiffer collection in Berlin. Attempts in 1992 to collect the species at the type locality (Cuantla de las Amilpas, Puebla [Morelas], Mexico) were unsuccessful. The area is over-grazed by goat herding and intensely disturbed by other human uses; no population of any holosporid was found, and *C. pilocerei* is presumed to be extinct at its type locality.

6. The name *Cylindrella pilocerei* must be regarded as a nomen dubium, and the nominal species is of no utility for characterizing *Holospira*. The current concept of the genus is based on the morphology of other species that have long been associated with it (Pilsbry, 1902 (p. 666), 1946 (p. 115), 1953 (p. 141); Gilbertson, 1993 (p. 79)). Amongst these is the Texan *Cylindrella goldfussi* Menke, 1847, which is an originally included species of *Holospira* (paras. 1 and 3 above) and has since always been placed in the genus. The diagnostic features of the internal barrier of this species have been well described (see Pilsbry, 1946, p. 115) and syntypes are in the Natural History Museum, London. Nomenclatural stability in *Holospira* and more generally in the HOLOSPIRINAE would be maintained by the designation of *Cylindrella goldfussi* as the type species.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Holospira* Martens, 1860 and to designate *Cylindrella goldfussi* Menke, 1847 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Holospira* Martens, 1860 (gender: feminine), type species by designation in (1) above *Cylindrella goldfussi* Menke, 1847;
- (3) to place on the Official List of Specific Names in Zoology the name *goldfussi* Menke, 1847, as published in the binomen *Cylindrella goldfussi* (specific name of the type species of *Holospira* Martens, 1860).

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